USSR UDC 669.167.26

BUSHMELEV, V. M., TYURIN, YE. I., DUMCHEV, YA. P., KATAYEV, V. M., VOLKOV, S. YE., PUPYNINA, S. M., SHARAFOV, A. A., EAGLAY, V. M., MEDOVAR, B. I., LATASH, YU. V., Krasnyy Oktyabr' Plant, Central Scientific Research Institute of Ferrous Metallurgy and Institute of Electric Welding Imeni Ye. O. Paton, Academy of Sciences Ukrainian SSR

"Production of 4-Ton Ingots in a Bifilar Electroslag Remelting Furnace"

Moscow, Stal', No 3, Mar 70, pp 236-238

Abstract: The article describes a bifilar electroslag remelting scheme developed at the Institute of Electric Welding imeni
Ye. O. Paton, which provides for the melting in one crystallizer
of two electrodes, isolated from each other, which are attached
to one electrode holder and connected to the ends of the secondary winding of a single-phase transformer with the same power
as in a single-electrode furnace. In order to obtain rectangular 640X460 ingots weighing 4 tons, one of the electroslag
remelting furnaces of the Krasnyy Oktyabr Plant, designed for

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

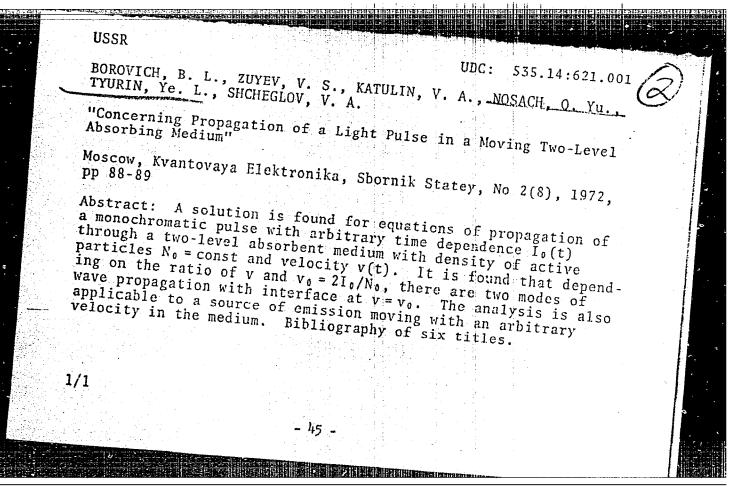
USSR

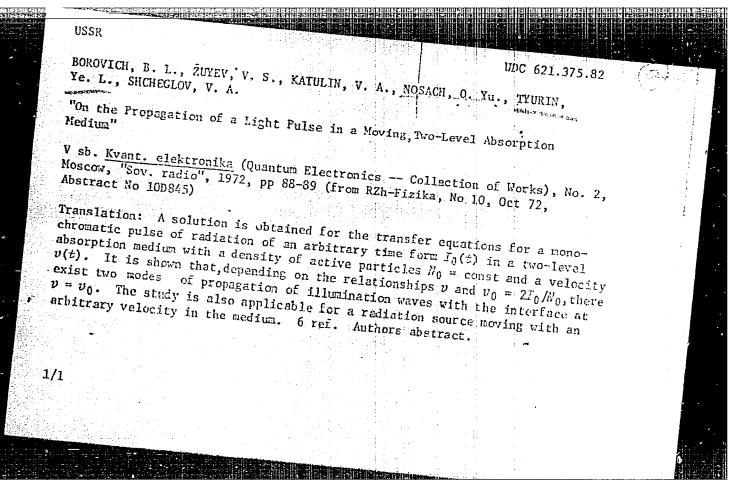
BUSHMELEV, V. M., et al, Stal!, No 3, Mar 70, pp 236-238

the production of 2-ton ingots according to the single-electrode scheme and equipped with a single-phase 1000-kva transformer, was remodeled for melting according to the bifilar scheme. Only the mechanical part of the furnace underwent alteration. Slag systems used for the melting included CaF2-flound that the production of metal of satisfactory quality in the bifilar furnace requires the same degree of submersion of the electrodes in the slag bath, as well as keeping the plished with the use of simple devices. The bifilar scheme energy consumption by 25-29 percent. Data are presented on structural steel 40KhNMA and stainless sheet steels 10Kh12NVMFA (EI962) and Kh23N18 obtained on the bifilar furnace.

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USSR

UDC 621.378.9:533.9.02

BASOV, N. G., ZAKHAROV, S. D., KROKHIN, O. N., KRYUKOV, P. G., SENATSKIY, Yu. V., TYURIN, Ye. L., FLDOSIMOV, A. I., CHEKALIN, S. V., SHCHELEV, M. Ya.

"Studies of a Plasma Formed by Ultrashort Laser Pulses"

Moscow, Kvantovaya Elektronika, No. 1, 1971, pp 4-28

Abstract: Experimental studies of processes occurring in the high-temperature heating of a plasma by focusing ultrashort laser radiation on the surface of lithium deuteride are described. Studies of plasma heating with laser radiation of duration 10-11-10-12 sec were begun in 1968 at the Laboratory of Quantum Radiophysics of the Physics Institute imeni P. N. Lebedev. Fast neutrons were recorded upon focusing these pulses on the surface of a lithium deuteride target, indicating the rise of conditions for a thermonuclear db-reaction and for obtaining a plasma of high temperature and density. Subsequent research raised the following questions: how does absorption of energy by a solid occur if the laser radiation is concentrated in a pulse with a duration of several picoseconds? How is the strong reflection of laser radiation from the target explained? What are the possibilities of raising ion temperature, and consequently neutron yield, in

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BASOV, N. G., et al, Kvantovaya Elektronika, No. 1, 1971, pp 4-28

heating a plasma with ultrashort pulses? Shadow photographs of the plasma with illumination by ultrashort pulses and the recording of plasma dispersion with the aid of an electron-optical converter are described. The same electron-optical converter was used to study the change in the reflection of laser pulses with the review of the basic experimental data indicates that the results are from laser pulses consisting not of one, but of several subpulses. Experiments show that the interaction of each subpulse with the target is not the same but a function of the previous history and repetition time of the subpulse relative to the first subpulses incident on the target ionizes it to a depth approximately equal to the value of n the proximately equal to the value of n the proximately equal

the plasma to a temperature of several electron-volts occurs simultaneously with incident on the target at this stage will be reflected until the particle density high-temperature heating of the plasma is possible. It is thus established that radiation and heat conductivity, the effect of laser radiation pressure, and electron-volts occurs simultaneously with drops, as a result of dispersion, to a value corresponding to n. At this time high-temperature heating of the plasma is possible. It is thus established that radiation and heat conductivity, the effect of laser radiation pressure, and electron-ion relaxation in a plasma formed by a powerful ultrashort laser pulse.

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USSR

UDC 621.357.12.035.48:669.75

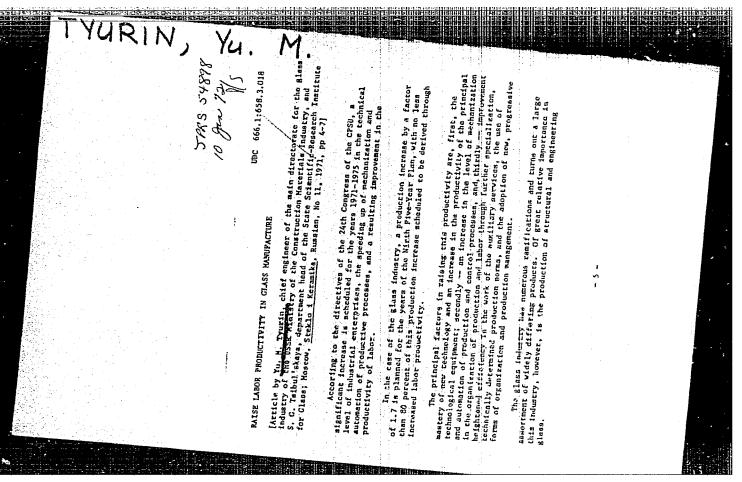
BUGENOV, YE. S., SAZONOVA, T. V., GOLOVIN, YU. M., and TYURKIN, YU. I.

"Regeneration of Sulfide-Alkali Electrolytes by Anode Solution of Cast Iron

Alma-Ata, Khimiya i Khim. teckhnol. (Chemistry and Chemical Technology) Vyp 2, 1971, pp 160-163 (from Referativnyy Zhurnal -- Khimiya, No 7, 1973, Abstract No 7L373)

Translation: A process is described to remove thiosulfate-, polysulfides, and thioantimonates reducing the VTk [expansion unknown] of Sb during the electrolysis of sulfide-alkali solutions by a method of anode solution of cast iron shavings. The above ions are scavanged under the influence of the divalent iron atoms and precipitate in the form of an insoluble precipitate of ferrous sulfide. For a Da 9.0-9.5 a/m² and a temperature of 50°C the optimum maximum reduction in the undesirable impurities was observed. The solution purified in the above manner was then treated to remove by electrodesposition the Sb at a high energy rate.

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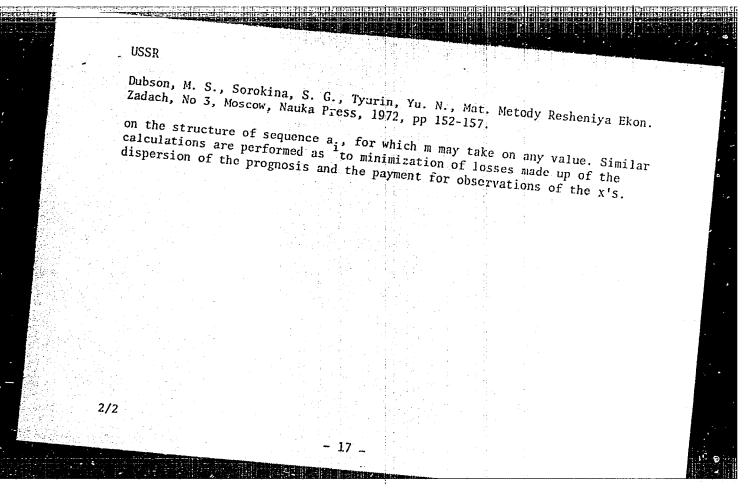
DUBSON, M. S., SOROKINA, S. G., TYURIN, Yu. N.

"The Best Selection of Factors in a Prediction Problem"

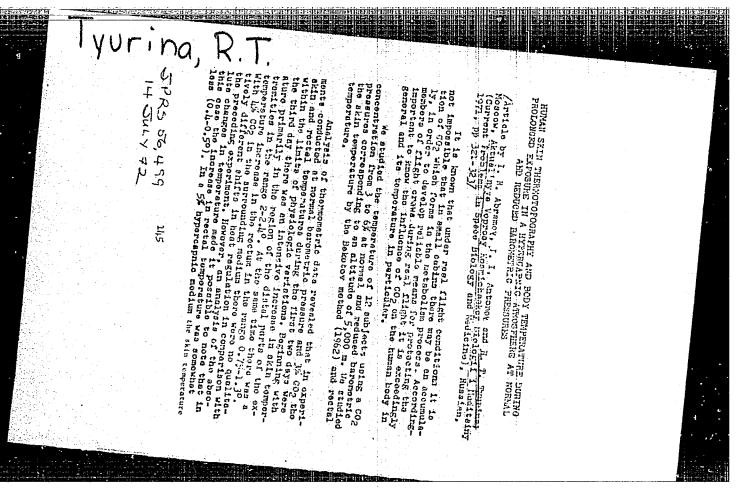
Mat. Metody Resheniya Ekon. Zadach [Mathematical Methods of Solution of Economics Problems -- Collection of Works], No 3, Moscow, Nauka Press, 1972, pp 152-157 (Translated from Referativnyy Zhurnal Kibernetika, No 6, 1973, Abstract No 6V176, by the authors).

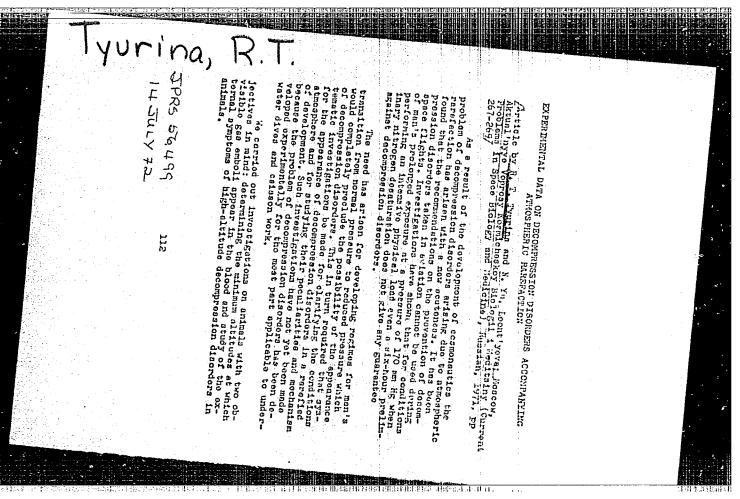
Translation: Suppose $y = \sum_{l=1}^{\infty} a_l x_l$, where x_1 , x_2 ,... are independent normal random quantities with parameters (0, 1), a_1 , a_2 ,... are constants. It is assumed that n independent observations of the x's and y's are made. Using the method of least squares, they can be used to produce m < n estimates â. Suppose, furthermore, one more sequence of x's x_1^* , x_2^* ,... is observed, from which we construct the y prediction $y_m^* = \sum_{i=1}^m \hat{a_i} x_i^*$. The question is, with what number m of selected prediction factors is $D(y - y_{II}^*)$ best in the sense of the minimum? This dispersion is calculated. The optimal sample m depends

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1/2 026 UNCLASSIFIED PROCESSING DATE--020C170

TITLE--DYNAMIC MECHANICAL PROPERTIES OF MULTICOMPONENT POLYMERIC.

COMPOSITIONS -UAUTHOR-(05)-AIVAZOV, A.B., ZHIVAYEV, V.YA., NIKIFOROVA, A.V., ZELENEV,

YU.V., IYURINA, V.S.

COUNTRY OF INFO--USSR

SOURCE--MEKH. POLIM. 1970, 6(1), 138-41

DATE PUBLISHED----70

SUBJECT AREAS -- MATERIALS

TOPIC TAGS--ELASTIC MODULUS, CARBON BLACK, POLYISOPRENE, POLYSTYRENE RESIN, POLYPROPYLENE, POLYVINYL CHLORIDE, LOW TEMPERATURE EFFECT, HIGH TEMPERATURE EFFECT/(U)SK13 POLYISOPRENE, (U)SKMS30 METHYLSTYRENE RUBBER

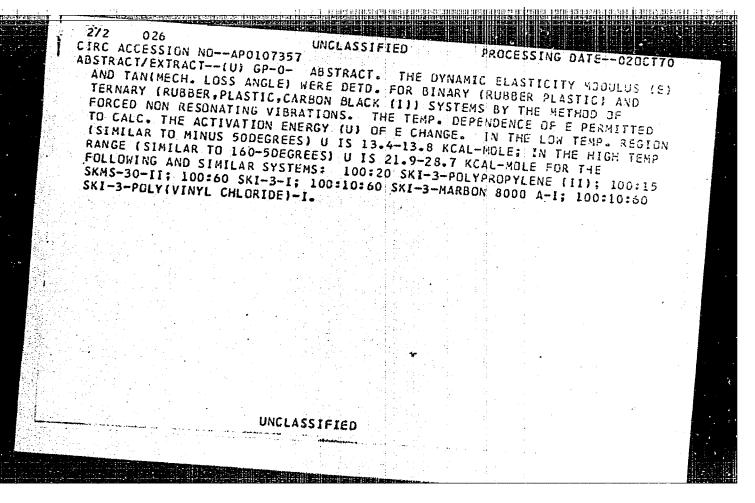
CONTROL MARKING--NO RESTRICTIONS

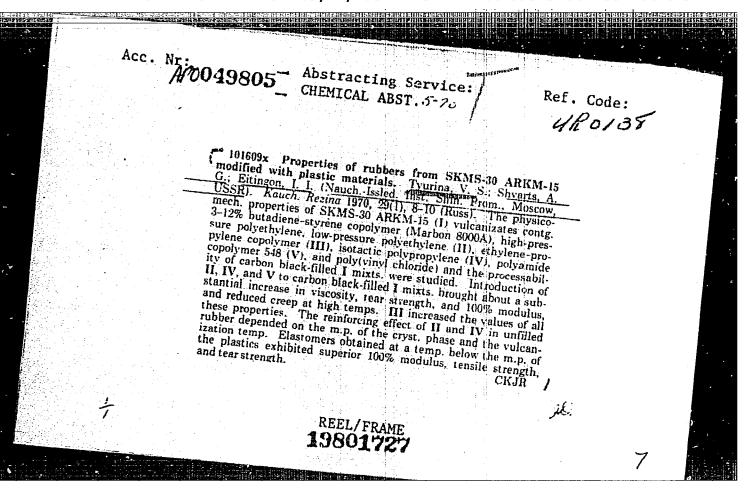
DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1989/0815

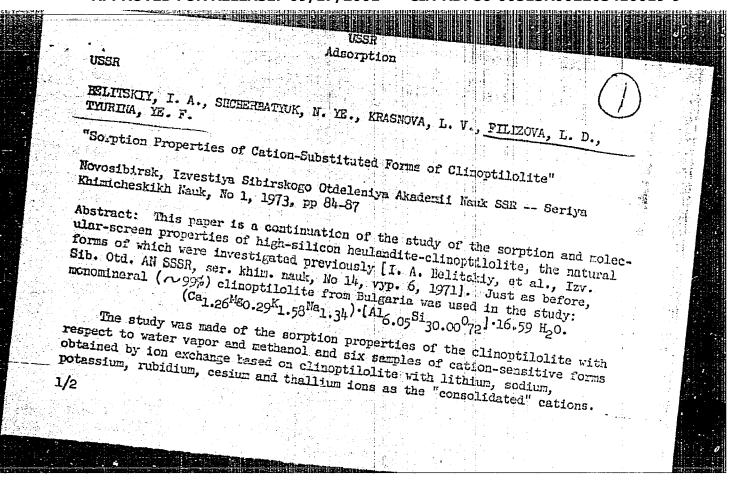
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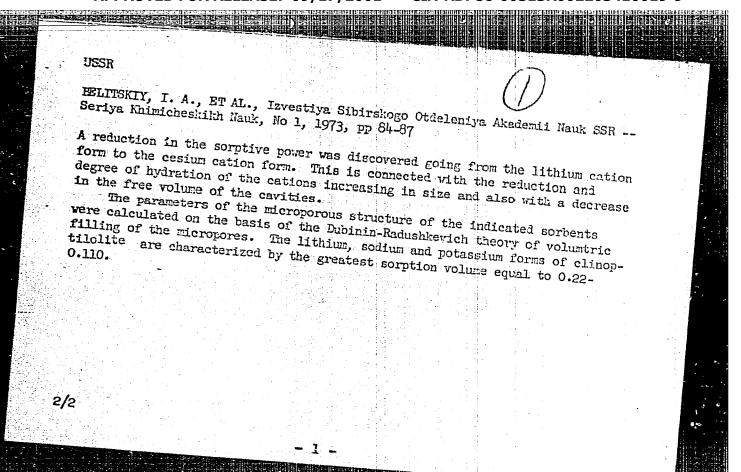
CIRC ACCESSION NO--APO107357

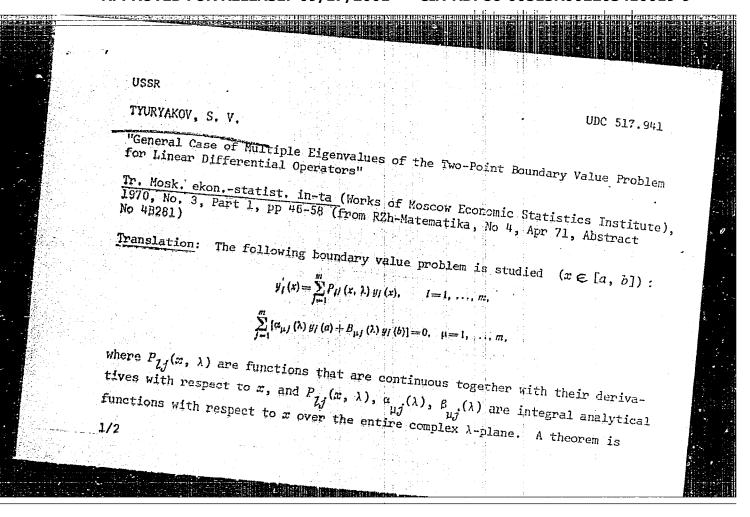
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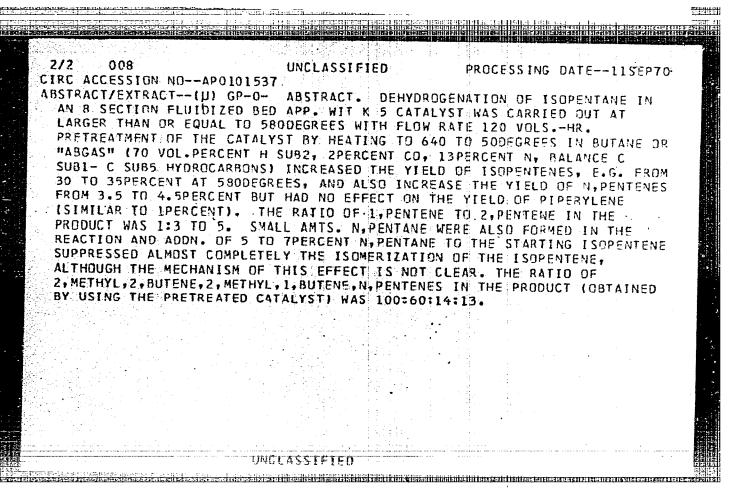




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PROCESSING DATE--115EP70 1/2 008 UNCLASSIFIED TITLE--SKELETAL ISOMERIZATION DURING ISOPENTANE DEHYDROGENATION IN A FLUIDIZED BED OF K 5 CATALYST -U-AUTHOR-MIKHAYLOV, R.K., BUSHIN, A.N., TYURYAYEV, INYA., KHRIPINA, S.M. COUNTRY OF INFO--USSR SOURCE-KHIM. PROM. (MOSCOW) 1970, 46(1) 3-7 DATE PUBLISHED----70 SUBJECT AREAS--CHEMISTRY TOPIC TAGS--FLUIDIZED BED, ISOMERIZATION, ISOPENTANCE, CATALYTIC DEHYDROGENERATION, PENTANE, PENTENE, CATALYST/(U)K5 CATALYST CONTROL MARKING--NO RESTRICTIONS DOCUMENT CLASS--UNCLASSIFIED STEP NO--UR/0064/70/046/001/0003/0007 PROXY REEL/FRAME--1985/1451 CIRC ACCESSION NO--APO101537 UNCLASSIFIED

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"



Publications

USSR

TYURYUK ANOV, A. N.

Biosfera i Chelovechestvo (The Biosphere and Humanity), Moscow, Zaniye Publishing House, Seriya Biologiya, No 12, 1973, 64 pp

Translation: Annotation: The author considers the history and current state of problems of the biosphere. He discusses the concept of the biosphere, its evolution, constituent elements, and structure, as well as the biogeochemical function of humanity. He points out the boundaries of the biosphere and the vitasphere, and explains the theory of biogeocommunities and the role of plants and soil animals in their life.

This booklet considers the system of interrelations in the biosphere and human influence on the biosphere and its elements.

| The Biosphere | Page |
|--|------|
| From the History of the man | 6 |
| | 9 |
| The Vitasphere and the Biogeo-Community of the Planet | 15 |
| TO THE PROPERTY OF THE PROPERT | 24 |
| Industrial Dumps and Their Recultivation | 29 |
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| | TYURYUKANOV, A. N., Seriya Eiologiya, No 12, 1973, 64 pp | | |
| | Problems of Increasing the Planet's Biological Productivity The International Program "Man and the Biogram" | 37 | • |
| | TODGET CIT THE APPR OF MOREON CO. | 42 | |
| | Research in the Area of Human Part | 46 | |
| | osing and rreserving Genetic Possissian | 48 | |
| | rational use of Natural Recovers | 49 50 | |
| | Investigating Pollution and Monitoring It | 50 | |
| | Truthing of the Elementeur and Change, t | 51 53 | |
| - | TOWNSHIP DUCTORY BY THE INTRODUCTION TO THE T | 55 54 | |
| | Training and Research Centers for Rational Use of and | 24 | . • |
| | Preserving the Resources of the Biosphere Non-School Education About the Environment for Young People and Adults | 55 | |
| | Science and Resource Policy | 56 | |
| | ITeserving Endangemed Notanger a | 57 | · |
| 100 mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/m | | 58 | |
| | J 2/2 하네 [1] | 60 | |
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1/2 013 UNCLASSIFIED PROCESSING DATE--04DEC70
TITLE--SOME ASPECTS OF TEACHING ON THE BIOSPHERE AND BIOGEOCENOSIS -U-

AUTHOR--TYURYUKANOV, A.N.

COUNTRY OF INFO--USSR

SOURCE--BIOL. NAUKI 1970, (4), 46-52

DATE PUBLISHED ---- 70

SUBJECT AREAS--BEHAVIORAL AND SOCIAL SCIENCES, BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--BIOSPHERE, MAN, TEACHING METHOD

CONTROL MARKING--NO RESTRICTIONS

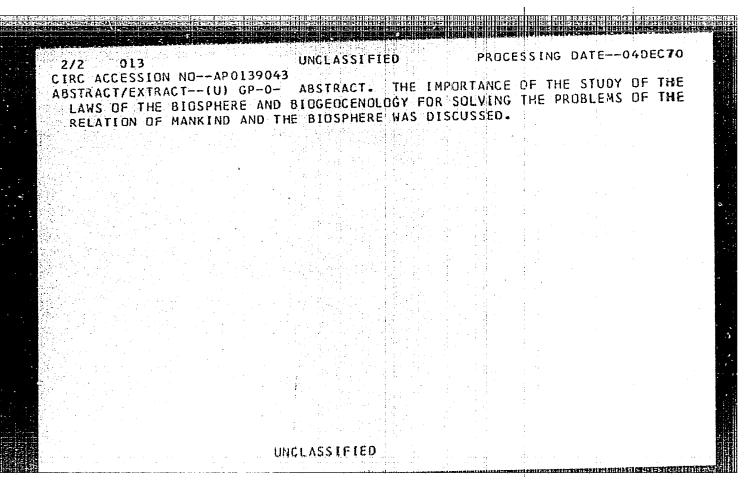
DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--3009/0180

STEP NO--UR/0325/70/000/004/0046/0052

CIRC ACCESSION NO--APO139043

UNCLASSIFIED

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"



Ref. Code: UR 0240

PRIMARY SOURCE: Gigiyena 1 Sanitariya, 1970, Nr 1, pp 61-66

FEATURES TO PECULIAR GLOBAL CESIUM-137
AND STRONTIUM-90 REACHING THE POPULATION
OF POLECIA BY DIFFERENT FOOD SUPPLY ROUTES

A. N. Mareu, R. M. Barkhudarou, V. K. Chumak, E. V. Petukhona,
E. B. Tununkhanapa, G. A. Kunetsova, N. Ya. Novikova,
S. B. Pozhivilova, G. A. Bogdanovich

The paper presents investigation data on the order of passage of abovementioned isotopes from the soil into food products with due regard for the soil nature and the accumulation of isotopes in the human body. The finding was that the extent of the passage of cesium-137 from the soil into food products fluctuated considerabley and depended on the type of soil. Thus, in a soil consisting mainly of a sand fraction the passage of cesium-137 was more pronounced. Similar observation were made in respect to all of the objects examined. However, no differences in the migration of strontium-90 could be detected. Due to the high passage of cesium-137 into food products its content in the human body was high as well.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

USSR

UDC 621.374.5(088.8)

TYPISHEY V. S., KONDRATJV, A. V., TIMOFEYEV, Yu. V., SHELUD'KO, O. V., Morthwest Polytechnical Correspondence Institute

"A Wide-Band Ultrasonic Delay Line"

USSR Author's Certificate No 287101, filed 27 Apr 67, published 7 Apr 71 (from RZh-Radiotekhnika, No 11, Nov 71, Abstract No 11G335 P)

Translation: This Author's Certificate introduces a wide-band ultrasonic delay line whose ultrasonic channel is made in the form of a piezoelectric plate with damper devices on the ends of the plate and with metallic input and output electrodes vaporized on the plate. Connected between the input and output electrodes is a feedback circuit which contains a wide-band pulse generator. To extend the range of the delay time, a slave pulse generator is connected in the feedback circuit. This pulse generator is controlled through a switching device from a coincidence gate. The outputs of a time delay pickup and a pulse counter are connected to the input of the coincidence gate. One input of the pulse counter is connected to the output electrodes of the ultrasonic channel, while the other is connected to the coincidence gate. The delayed signal is taken off from the output of the coincidence gate. Resumé.

USSR

UDC:666.1.036.23

KRAS'KO, A. S., Engineer, KAKHANOVICH, V. S., TYUSHKEVICH, N. I., Candidates of Technical Sciences, CHEPURKIN, A. A., Engineer, Belorussian Affiliate of Power Institute Imeni, G. M. KRZHIZHANOVSKIY

"Frequency Sensor for Continuous Testing of Glass Fiber Thickness During Production"

Moscow, Steklo I Keramika, No 9, Sep 1970, Pages 16-18

Abstract: Methods currently used for testing the thickness of glass fiber are "passive," that is, performed after production and have low reliability. This article presents certain results from the investigation of a frequency method of testing the thickness of glass fiber during production. The method is based on the relationship between natural oscillating frequency of a drawn string and linear mass and tightness. An experimental model of a frequency sensor has been developed. Production tests of the sensor have confirmed its useability. The error does not exceed 4%, with 95% confidence. In the device, a vibrator forming one end support of the length of fiber drawn causes the fiber to oscillate, and the frequency of natural oscillations is measured by a photosensor.

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USSR

UDC 621.374.33(088.8)

TYUSHKIN, V. A., IVANOV, R. F.

"Device for Quenching a Thyristor"

USSR Author's Certificate No 251073, Filed 4 Jul 68, Published 3 Feb 70, (From RZh-Radiotekhnika, No 8, Aug 70, Abstract No 86279 F)

Translation: This author's certificate introduces a device for quenching a thyristor. The device contains a commuting capacitor and transformer, the primary winding of which is connected in series to the thyristor, and the secondary winding, in series to the capacitor. For simplification, a dynistor is connected between the point at which the capacitor place and the secondary winding are joined and the thyristor cathods.

USSR

UDC 669.715.018.29.539.341.9

MAKAROV, A. I., TYUTEVA, N. D.

"Influence of Ultrasonic Oscillations on Structure and Properties of AK-4 Aluminum Alloys"

Avtomatiz. Proizv. Protsessov. v Mashinostr. Metalloved. Term. Obrabotka Met. i Svarochn. Proiz-vo. Ch. 4 [Automation of Production Processes in Machine Building, Metal Science, Heat Treatment of Metals and Welding Production, Part 4 - Collection of Works], Tomsk University Press, 1970, p. 219. (Translated from Referativnyy Zhurnal Metallurgiya, No. 5, 1971, Abstract No. 5 1674 by V. Bochkareva).

Translation: Tests were performed on crystallizing A1 alloys before the beginning of crystallization (C), at the moment of C, and after completion of C. The frequency of US oscillations was 440 KHz. The greatest change in the structure and properties was produced when US oscillations were applied at the moment of C.

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1/2 027
TITLE--ELECTRON MULTIPLIERS OF THE OPEN TYPE -UAUTHOR--TYUTIKOV, A.M.
COUNTRY OF INFO--USSR

SOURCE--USP. FIZ. NAUK 1970, 100(3), 467-503

DATE PUBLISHED-----70

SUBJECT AREAS--NUCLEAR SCIENCE AND TECHNOLOGY, PHYSICS
TOPIC TAGS--ELECTRON MULTIPLIER, SECONDARY ELECTRON, RADIATION DETECTOR

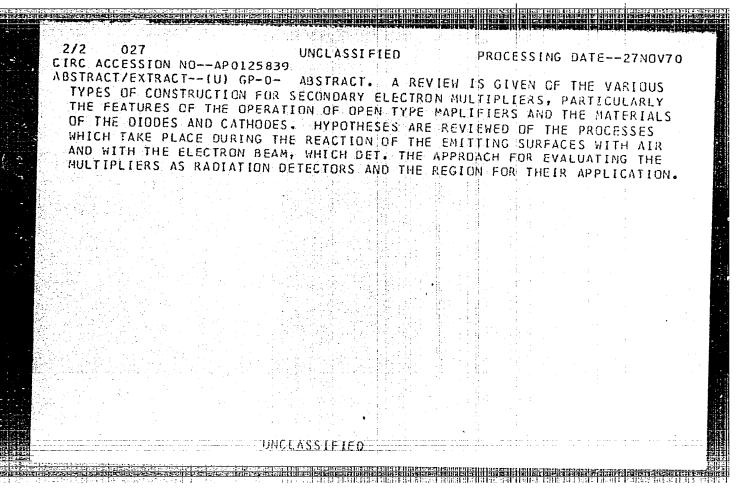
CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--2000/2261

STEP NO--UR/0053/70/100/003/0467/0503

CIRC ACCESSION NO--AP0125039

UNCLASSIFIED



USSR

UDC 535-31:576.8.06

TYUTIKOV, F. M. and POLYAKOV, V. A.

"Comparison of the Bactericidal Effect of Ultraviolet Radiation on Pathogenic Microorganisms: Bacterium necrophorum, Clostridium botulinum, and Listeria monocytogenes"

Moscow, Doklady Vsesoyuznoy Akad. Sel'sko-Khoz. Nauk, No 5, 1973, pp 36-37

Abstract: Six Bacterium Necrophorum, 4 Clostridium, botulinum, and 10 Listeria monocytogenes strains were exposed to ultraviolet light and their resistance evaluated on the basis of the dose-effect curve, slope of the exponential part, LD37 or LD90, and extrapolation number. Virulence, growth phase, type of serotype, and incubation temperature (only in the case of Listeria) were also taken into account. No correlation was detected between virulence, type or serotype and degree of resistance to radiation was detected. The curve of inactivation by ultraviolet radiation was sigmoid for most of the strains studied.

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

USSR

UDC 005.513.5:025.135(088.8)(47)

GOLDYREV, V. I., KARELIN, B. V., TYUTIKOV, L. S., Scientific Research Institute of Control Computers and Systems

"A Device for Retrieving Edge-Punched Cards"

USSR Author's Certificate No 318969, Division G, filed 9 Mar 70, published 24 Jan 72 (from RZh-Avtomatika, Telemekhanika i Vychislitel'naya Tekhnika, No 11, Nov 72, abstract No 11B344P)

Translation: A device is proposed which contains a base, a vibration platform, a punchcard magazine with support strips, and selector racks which
are kinematically coupled to the keyboard levers of the code set-up mechanism. In order to increase speed, the device contains double-arm levers
with the selector rack fastened on one arm, while the other arm is connected
to the keyboard lever of the code set-up mechanism. Four illustrations.

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Computers Digital

USSR

(DC: 005.013.5:025.135

GOLDYREV, V. I., KARELIN, B. V., TYPFIKOV, L. S., Scientific Research Institute of Control Computers and Systems

"A Device for Retrieval of Edge-Punched Cards"

Moscow, Otkrytiya, Izobreteniya, Promyshlennyye Obraztsy, Tovarnyye Znaki, No 32, Nov 71, Author's Certificate No 318969, Division G, filed 9 Mar 70, published 28 Oct 71

Translation: This Author's Certificate introduces a device for retrieval of edge-punched cards. The unit consists of a base, a vibration platform, a punchcard magazine with support fingers, and selector racks which are kinematically coupled to the key levers of a code setup mechanism. As a distinguishing feature of the patent, the speed of the device is increased by using two-armed levers with a selector rack coupled to one arm and a key lever of the code setup mechanism connected to the other.

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USSR

UDC 621.382.2/3.012

TYUTIN A. A., PINSON, A. M.

"Calculating the Conditions and Parameters of Transistors and Diodes in Circuits With a Distinct Linear Section"

Avtomatiz. proyektir. v elektron. Resp. mezhved. nauch.-tekhn. sb. (Design Automation in Electronics. Republic Interdepartmental Scientific and Technical Collection), vyp. 2, Kiev, "Tekhnika", 1970, pp 29-34

Abstract: The authors consider algorithms for computing the conditions and differential parameters of transistors and diodes in circuits with a distinct linear section. A very simple example is presented. Two tables, five illustrations, bibliography of three titles.

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

USSR

BORKOVSKIY, B. A., VOLLERNER, A. N., KATKOV, A. F., AULIK, M. N., ROMANTSOV, V. P.,

"Modeling Mathematical Machines with Variable Structure"

Modeliruyushchiye Matematicheskiye Mashiny S Peremennoy Strukturoy, [English Version Above], Kiev, Nauk. Dumka Press, 1970, 248 pages, (Translated from Referativnyy Zhurnal Kibernetika, No 5, 1971, Abstract No. 5V602 K, unsigned).

Translation: Results are presented from theoretical studies of models with variable structure, designed for modeling of mathematical operations, systems of finite equations and linear differential equations. Significant attention is given to methods of studying models with variable structure and recommendations are given for their engineering planning. The book is designed for engineers, scientific workers and graduate students interested in electronic modeling.

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1/2 019 UNCLASSIFIED PROCESSING DATE--27MOV/O

AUTHOR -- TYUTIN- 1.V.

COUNTRY OF INFO--USSR

SOURCE-TEORETICHESKAYA I MATEMATICHESKAYA FIZIKA, 1970, VOL 3, NR 2, PP 212-227 DATE PUBLISHED----70

SUBJECT AREAS -- PHYSICS

TOPIC TAGS--QUANTUM FIELD THEORY, ELECTROMAGNETIC FLELD, MESON, FERMION, S. MATRIX

CONTROL MARKING--NO RESTRICTIONS

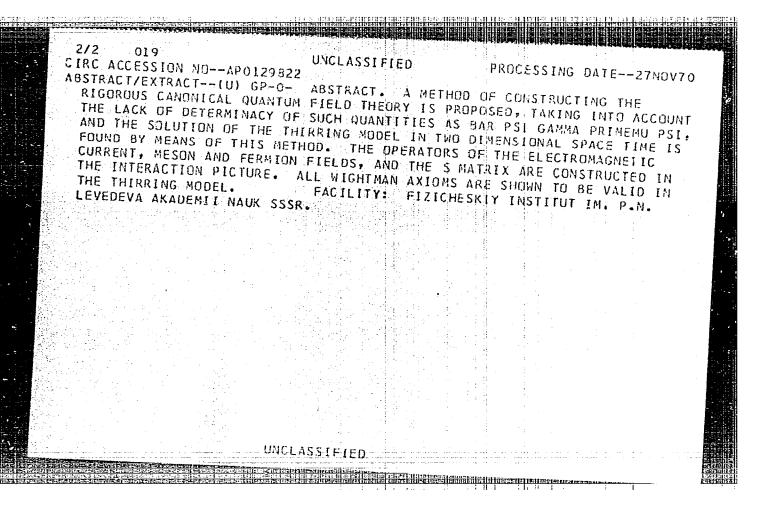
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STEP NO--UR/0646/70/003/002/0212/0227

CIRC ACCESSION NO--APOl29822

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"



USSR

UDC 617.54-02:617.55-001.12-092.9]-073.75

TYUTIN, L. A., VOLOSHIN, V. G., and KRASNYKH, I. G.

"X-ray Study of the Thoracic Organs During Decompression of the Lower Half of the Body"

Moscow, Vestnik Rentgenologii i Radiologii, No 2, 1971, pp 26-30

Abstract: Healthy male subjects 20- to 25-years old were subjected to negative pressures of 40 mm Hg for 20 min and 80 mm Hg for 10 to 20 min after a rest period while lying on their backs in a special container with elastic girdles around their waists. X-rays taken at the end of the diastole revealed the presence of shifts normally observed after accelerations in a head-pelvis direction: downward displacement of the diaphragm and higher position of the lungs, decrease in the main dimensions of the heart (especially the length), decrease in blood flow in the vessels in the upper portions of the lungs, and some reduction in the diameter of vessels in the lower portions, decrease in the diastolic angle of slope of the cardiac axis, and marked increase in blood flow to the heart after rapid normalization of the pressure.

- 56 -

TITLE--CONCENTRATION OF FREE AMIND ACIDS IN THE BLOOD OF PATIENTS WITH AUTHOR-(05)-TYUTIN, L.A., NIKITINA, M.P., SEREGIN, M.S., TYUTINA, YE.M., COUNTRY OF INFO--USSR

SCURCE--- VOP. ONKOL. 1970, 16(2), 29-33

DATE PUBLISHED ---- 70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS-AMINO ACID, REPRODUCTIVE SYSTEM, CANCER, SURGERY, RADIOTHERAPY, PAPER CHROMATOGRAPHY, ENZYME ACTIVITY

CONTROL MARKING--NO RESTRICTIONS

PROXY REEL/FRAME--1998/0251

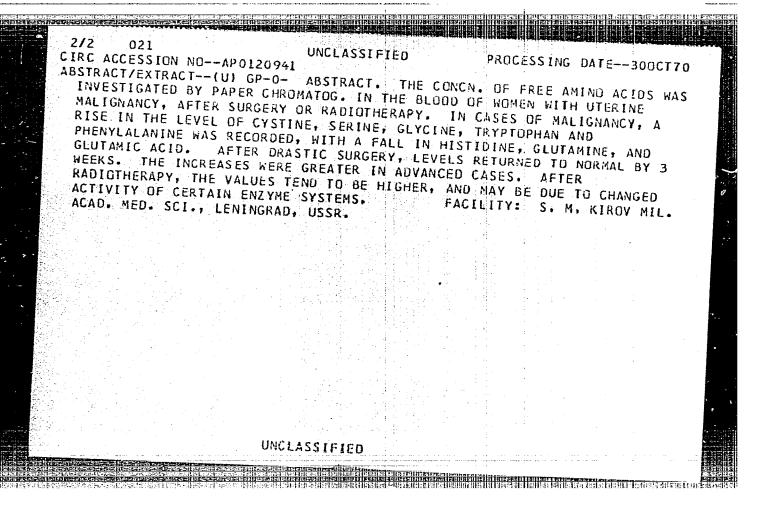
STEP NO--UR/0506/T0/016/002/0029/0033

CIRC ACCESSION NO--APO120941

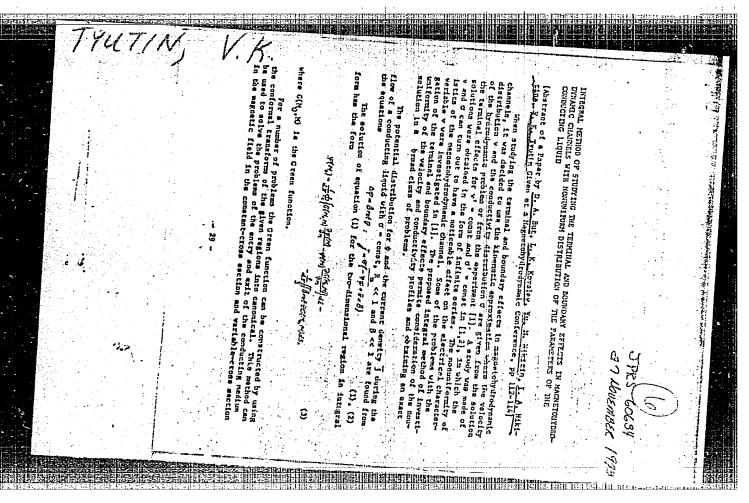
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USSR

UDC: 537.5.62

BERTINOV, A. I., TYLITE, V. K., and KHVESYUK, V. I., Moscow Aviation Institute imeni S. Ordzhonikidze

"Methods for Determining the Fields of the Coefficients of Radiation of an Ionized Gas in Rectangular Channels"

Moscow, Teplofizika Vysokikh Temperatur, Vol 10, No 1, Jan-Feb 1972, pp 35-40

Abstract: The authors study the problem of determining the local coefficients of radiation of an ionized gas. A general expression is derived which relates integral intensities and the local coefficients of radiation $\varepsilon(x,y)$ for flows of arbitrary cross section. In the case of flows of rectangular cross section, this expression reduces to a system of linear algebraic equations. A simplified method is proposed for determining radiation coefficients. This method is suitable in those cases where $\varepsilon(x,y)$ can be presented in the form of the product of two functions each of which depends only on one argument. The authors thank D.A. But figures, and five bibliographic entries.

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

USSR

UDC: 621.357.7

BOGOSLOVSKIY, V. V., TYUTINA, K. M., MUZYCHENKO, L. A., KUDRYAVTSEV, N. T.

"Optimization of the Process of Electrodeposition of Nickel-Antimony Alloy"

Moscow, Zashchita Metallov, Vol 9, No 3, Jul-Aug 73, pp 455-456.

Abstract: An experimental-statistical method is used to construct a mathematical model of the process of electrodeposition of shiney nickel-antimony alloy deposits with minimum internal stress. The optimization parameters selected were the diffuse-scattered light intensity and the internal stresses in the alloy, expressed in ocular microscope divisions. The experimental data, following statistical checking, were used to produce two equations to calculate the conditions of deposition of the nickel-antimony deposits with minimum internal stresses: NiCl₂·6H₂O 59 g/1; SbF₃ 3 g/1; NH₄Cl 2l g/1; NH₄F 4l g/1; $D_c = 0.5$ -6 a/dm²; pH 4.5; temperature 70°; antimony anodes.

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

USSR

UDC 669.24'6.018.9(088.8)

KUDRYAVTSEV, N. T., TYUTINA K KOSMODAMIANSKAYA, L. V.

"Method of Electrolytic Deposition of Tin-Nickel Alloy"

USSR Author's Certificate No 310951, filed 26 Mar 70, published 1 Oct 71 (from RZh-Metallurgiya, No 4, Apr 72, Abstract No 4G318P)

Translation: A procedure is proposed for electrolytic deposition of Sn-Ni alloy and an electrolyte containing NiCl₂, SnCl₂, NH₄F. It is distinguished by the fact that in order to increase the admissible D to obtain light bright deposition of the alloy, chloral hydrate is introduced into the electrolyte with the following content of the components (in g/ ℓ): NiCl₂ 300-350, SnCl₂ 45-50, NH₄F 60-65, chloralhydrate 0.5-2.0. The process is carried out at a pH of 4-4.5, a temperature of 52-55°, and D_c = 0.5-4 a/decimeter². The anodes are nickel, and S_A:S_C = 2:1. The alloyed deposits obtained contain 34-38% Ni.

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- 43 -

USSR

UDC 669.76'6.018.9(088.8)

KUDRYAVTSEV, N. T., TYUTINA K. M., GAVRILINA, L. P., and GAVRILIN, O. N., Moscow Institute of Chemical Technology imeni D. I. Mendeleyev

"Method of Electrolytic Deposition of Tin-Bismuth Alloy"

USSR Authors' Certificate No 305208, C1. C 23 b 5/38, filed 3 Feb 70, published 13 Jul 71 (from RZh-Metallurgiya, No 1, Jan 72, Abstract No 1G171P)

Translation: The method of electrolytic deposition of Sn-Bi alloy from an electrolyte containing SnSO₄, Bi(NO₃)₂, H₂SO₄ is unique in that, in order to raise the permissible current density limit and increase electrolyte stability, preparation OS-20 is put into the electrolyte in the following ratio of components (in g/liter): SnSO₄ 50-55, Bi(NO₃)₂ 0.5-0.8, H₂SO₄ 95-105, preparation OS-20 2-5, and the process is carried on at D = 0.5-2 a/sq decimeter and temperature of 20-25°.

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USSR

MAGZUMOV, B. Kh., SAIYANTS, T. I. TYUTINA V. A. STARTSEVA, L. I., and GILMANOVA, G. A., Chair of Social Hygiene and Public Health Organization, Tashkent Medical Institute

"Study of Basic Cardiovascular Diseases in Tashkent From a Sociosanitary Aspect"

Tashkent, Meditsinskiy Zhurnal Uzbekistana, No 10, Oct 70, pp 39-44

Abstract: The voluminous statistical data on the death rate due to cardio-vascular diseases in the Soviet Union indicate that these diseases are the number-one killers. Not only medical but also sociohygienic and socioeco-nomic measures must be taken to combat this set of diseases; however, the etiology, pathogenesis, and treatment have not yet been studied in detail. A study was made of the characteristics of cardiovascular diseases in relation to work and living conditions, characteristics of the spread of cardiovascular pathology in nosological forms, and analysis of cardiovascular diseases with time loss in work capacity, disability, and death. Data from the medical-prophylactic records in Tashkent were used. Data on workers from various Tashkent industries were included. Among this group 1/2

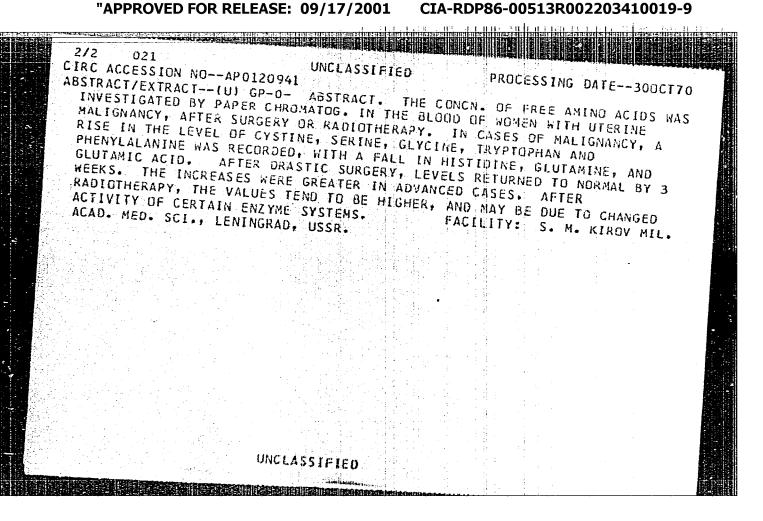
MAGZUMOV, B. Kh., et al, Meditsinskiy Zhurnal Uzbekistana, No 10, Oct 70, pp 39-44

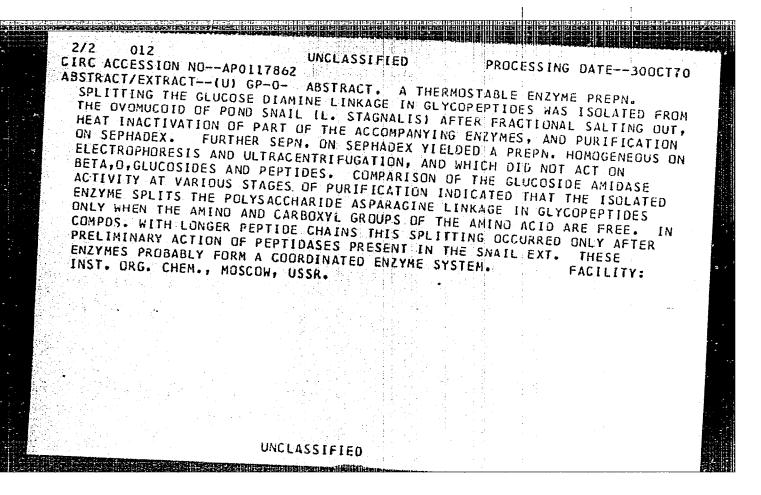
7.8% had cardiovascular diseases. Hypertension was found most frequently in women. Those in sedentary occupations requiring little physical exercise were more susceptible to hypertension than those engaged in physical work. As a result of this study, it was recommended that steps be taken to combat rheumatic fever, influenza, and other infectious diseases, to specifically treat those who live and work under conditions which promote cardiovascular disease, and to carry out sanitary-educational work in the field of cardiovascular diseases.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

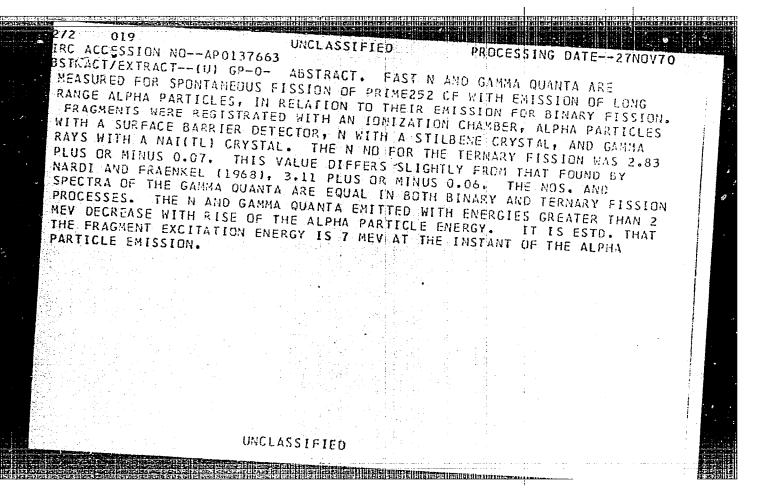
2/2

1/2 021 TITLE--CONCENTRATION OF FREE AMIND ACIDS IN THE BLOOD OF PATIENTS WITH PROCESSING DATE--300CT70 UTERINE CANCER DURING SURGICAL AND RADIATION TREATMENT -U-AUTHOR-(05)-TYUTIN, L.A., NIKITINA, M.P., SEREGIN, M.S., TYUTINA, YE.M., COUNTRY OF INFO--USSR SCURCE--VOP. ONKOL. 1970, 16(2), 29-33 DATE PUBLISHED----70 SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES TOPIC TAGS-AMINO ACID, REPRODUCTIVE SYSTEM, CANCER, SURGERY, RADIOTHERAPY, PAPER CHROMATOGRAPHY, ENZYME ACTIVITY CONTROL MARKING--NO RESTRICTIONS DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1998/0251 STEP NO--UR/0506/70/016/002/0029/0033 CIRC ACCESSION NO--APO120941 UNCLASSIFIED





UIO UNCLASSIFIED TLE--NEUTRONS AND GAMMA QUANTA FROM THE TERNARY FISSION OF CALIFORNIUM 252 -U-THOR 3051-ADAMOV, V.M., DRAPCHINSKIY, L.V., KOVALENXO, S.S., PETRZHAK, K.A., TYUTYUGIN, I.I. DUTRY OF INFO--USSR JURCE--YAD. FIZ. 1970, 11(5), 1001-5 TE PUBLISHED ---- 70 BJECT AREAS--PHYSICS, NUCLEAR SCIENCE AND TECHNOLOGY PPIC TAGS--NEUTRON, GAMMA QUANTUM, NUCLEAR FISSION, CALIFORNIUM ISOTOPE, ONTROL MARKING--NO RESTRICTIONS DOWNENT CLASS--UNCLASSIFIED ROXY REEL/FRAME--3008/0578 STEP NQ--UR/0367/70/011/005/1001/1005 TRC ACCESSION NO--APO137663 UNCLASSIFIED



USSR

VDC: 51

TYUTYUKIN, V. K.

"Local-Optimal Plan in the Problem of the Processing of Parts With the Same Technical Routing"

Leningrad, V sb. Primeneniye mat. v ekon. (Application of Mathematics to Economics--collection of works) Leningrad University, No 8, 1973, pp 3-20 (from RZh--Matematika, No 1, 1974, Abstract No 1V517)

Translation: The simplest model — the Johnson problem — of calendar planning is considered. The author examines the characteristics of the time-table structure. On the basis of these characteristics an algorithm is set up for finding some permissible plan for which the local minimum of the function-criterion (in metrics specified by the author) is attained. No estimate is given of the closeness of the plan obtained to the optimum. V. Portugal.

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- 49 -

USSR CHIGOGIDZE, Z. N., KHUCHUA, N. P., GUTNIK, L. M., KHARATI, R. G., VARLAMOV, I. V., BEKIREV, U. A., TYUTYUN, A. A. "Concerning the Mechanism of Failure of Gunn Diodes" Leningrad, Fizika i Tekhnika Poluprovodnikov, Vol 6, No 9, Sep 72, pp 1670-Abstract: Devices based on the Gunn effect operate most effectively at high bias voltages; however, increasing the voltage causes breakdown of the device. At present there is no unanimous opinion on the mechanism of failure and degradation of Gunn diodes. In this paper the authors investigate coplanar Gunn diodes with plane-parallel and annular electrode configurations both with and without a silicon dioxide passivating coating. The diodes were tested in the pulse mode. It is shown that in accordance with previously available experimental data the failure of Gunn diodes takes place as a result of formation of a shorting channel between the contacts of the device. Information is obtained on the dynamics of the visible portion of the breakdown by means of motion picture photography of this process through an optical microscope. It is shown that silicon dioxide passivation of the

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CHIGOGIDZE, Z. N. et al., Fizika i Tekhnika Poluprovodnikov, Vol 6, No 9, Sep 72, pp 1670-1676

active region has an appreciable effect on the nature of the visible portion of the breakdown and on the ratio of the breakdown voltage to the threshold voltage. A microscopic x-ray analysis is made of the composition of the contact regions and the channel on various stages of thermal breakdown. It is found that a transverse magnetic field affects the position of the shorting channels and the ratio of the breakdown voltage to the shorting the spectrum at voltages close to the breakdown voltage in the infrared region of that the cause of failure of Gunn oscillators at high bias voltages is the current-voltage curve due to impact ionization when a strong field domain passes over the specimen. The authors thank M. S. Shur for discussing the surements.

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USSR

UDC 620.193.43

CHETVERIKOV, A. V., PAVLENKO, N. A., TYUTYUNIK, O. A., and KORCHINSKAYA, O. A., Academy of Sciences UkrSSR, Institute of General and Inorganic Chemistry

"Investigation of the Corrosion Resistance of Nickel in SnCl2-KCl Salt Melt"

Moscow, Zashchita Metallov, Vol 9, No 2, Mar-Apr 73, pp 192-194

Abstract: The corrosion resistance of Ni in 80% SnCl_-20%NCl-melt was investigated by the weighing method at 300°, in order to obtain data necessary for the production of a semi-industrial unit for electrolytic tin-plating. The contents of metals in the melt, in wt.% after testing, are indicated and the results of corrosion tests of 4-64 hrs duration, conducted on a series of specimens in protective nitrogen atmosphere and without it, are discussed. A considerably higher corrosive pitting took place on specimens without pretective atmosphere, the corrosion rate reaching a maximum after four testing hours. The corrosion rate of partially submerged specimens was four times higher than the corrosion rate of completely submerged specimens. In nitrogen atmosphere, the cerrosion rate was independent of the degree of submergion. One figure, two tables, eight bibliographic references.

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

USSR

UDC:622.7:321.9.004

AKOPOVA, K. S., DOKSHINA, I. D., TYUTYUNNIK, N. D., YAKUBOVICH, I. A., ZADOROZHNYY, V. G., BELOGAY, P. D., DEGTYARENKO, A. V., TISHCHENKO, A. G.

"Use of Ultrasound in Enrichment of Titanium-Zirconium Deposits"

Moscow, Tsvetnyye Metally, No. 11, Nov 70, pp. 86-89

Abstract: A method has been developed for application of acoustical oscillations to minerals to change their surface properties before enrichment. This article presents results of an investigation of the influence of ultrasonics on the minerals in titanium zirconium placer deposits. It has been established that 1-3 minutes action of ultrasound at 20 Khz and intensity of 3.8 W/cm² greatly activates the flotation of minerals by the flotation oil. The yield of minerals in the foam product increases as follows: zirconium from 18.6 to 98.9%, rutile from 3.0 to 97.5%, collectors is also reduced and the flotation properties of minerals from different deposits are made more similar.

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1/2 800 UNCLASSIFIED PROCESSING DATE--300C170 TITLE--USE OF OLEFINS FOR PREPARING ALKYL SULFONATES -U-

AUTHOR-(05)-TYUTYUNNIKOV, B.N., KARETNIKOVA, V.S., BUKHSHTAB, Z.I.,
YUSHCHENKO, YE.P., GASYUK, L.V.

SOURCE--NEFTEPERERAB NEFTEKHIM. (MOSCOW) 1970, (21, 34-6 DATE PUBLISHED ---- 70

SUBJECT AREAS--CHEMISTRY, MATERIALS

TOPIC TAGS -- ALKENE, BIODEGRADABLE DETERGENT, AMMONIUM COMPOUND,

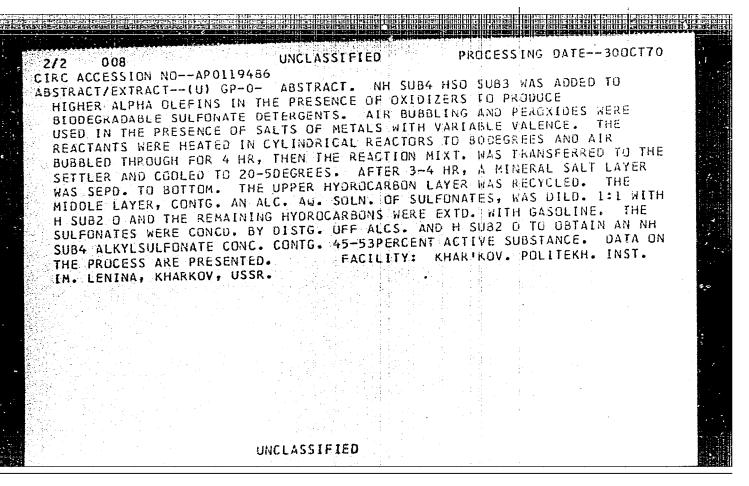
CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1997/0568

STEP NO--UR/0318/70/000/002/0034/0036

CIRC ACCESSION NO--APOL19486

UNCLASSIFIED



COUNTRY OF INFO--USSR

TITLE--EFFECT OF HYDROGEN, DISSOLVED IN THE METAL OF A HYDROGENATION PROCESSING DATE--230CT70 CATALYST, ON THE TRANSESTERIFICATION OF GLYCERIDES -U-AUTHOR-(02)-TYUTYUNNIKOV, B.N., MASTRUK, M.SH.

SOURCE--MASLO-ZHIR. PROM. 1970, 36(2), 18-20

DATE PUBLISHED ---- 70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES, CHEMISTRY

TOPIC TAGS--HYDRUGEN, ESTERIFICATION, GLYCERIDE, HYDROGENATION, CATALYST

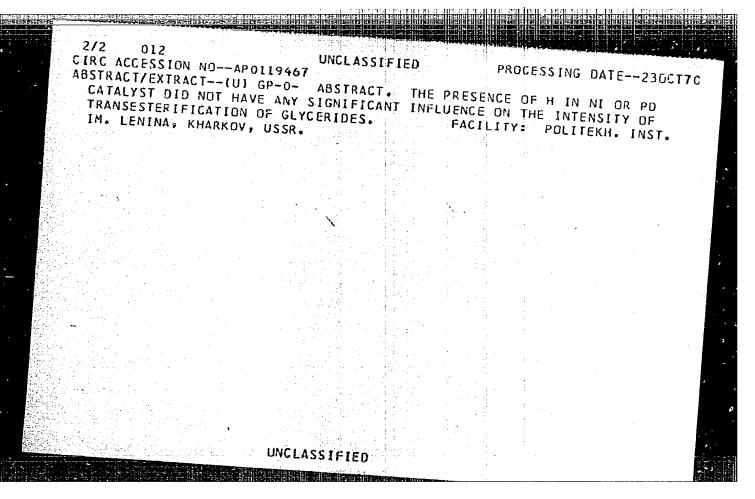
CONTROL MARKING--NO RESTRICTIONS

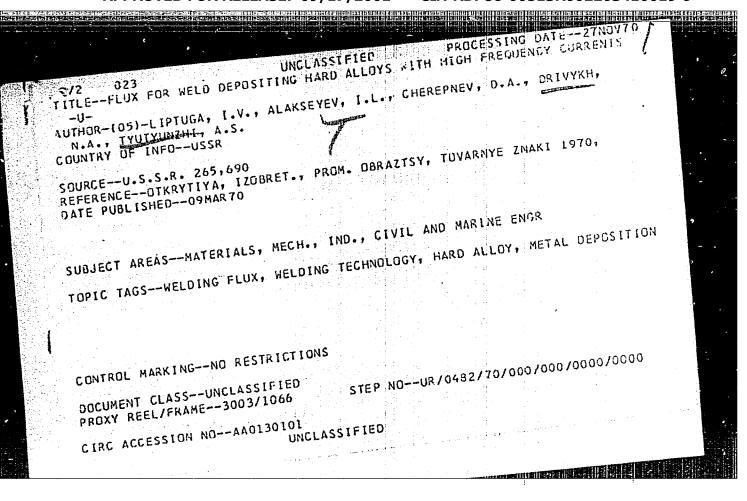
DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1997/0548

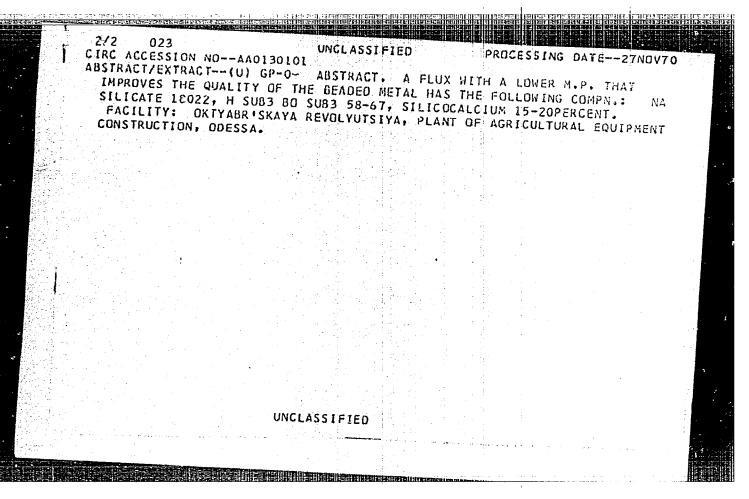
STEP NO--UR/9085/70/036/002/0018/0020

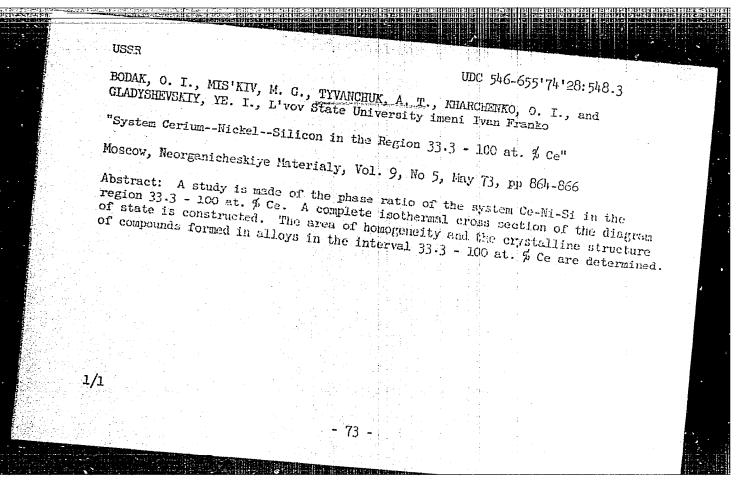
CIRC ACCESSION NO--APOL19467

UNCLASSIFIED









USSR

UDC 621.90

TYVES, L. I., Candidate of Technical Sciences and ANSHIN, S. S., Graduate Student Moscow Aviation Institute

"Qualitative Evaluation of Manipulators"

Izvestiya Vysshikh Uchebnykh Zavedeniy, Mashinostroyeniye, No 11, 1971, pp 41-45.

ABSTRACT: Criteria are suggested for the accuracy of reproduction of positions of the master mechanism by the actuating mechanism of a copying manipulator, as well as the quality of sensation of forces by the feedback tracking systems. An example is presented for calculation of these criteria for a planar model of a copying manipulator kinematically similar to the human hand. The "sensing error" used to evaluate the operation of the manipulator combines the errors in transmission of force and torque.

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USSR

WC 612.816-087.5

NAGAYEV, I. YA., OKSENGENDLER, G. I., and TZHEVKIN, V. A., First Medical Institue imeni I. P. Pavlov, Leningrad

"A Method of Determining the Threshold of Neuromuscular Excitation in Laboratory Animals"

Moscow, Gigiyena Truda i Professional'nyye Zabolevaniya, No 5, 1971, pp 48-49

Abstract: The authors describe a device capable of recording threshold values of neuromuscular excitation in response to electrical and chemical stimulation more objectively than current methods based on measurement of chronaxy. The device provides for uniform increase in voltage at the electrodes. It automatically turns off the current, measures the internal resistance of the animal's body, and records the results. Experiments on mice showed that the device was able to detect the minimum doses of hydrazine and tetraethyl lead capable of affecting the threshold of neuromuscular excitability.

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- 73

voc 632.95

CHEKAREVA, T. G., VASSERMAN, A. M., VORONKOVA, V. V., UAKIDENKO, Ye. F., and

"Photochemical Decomposition of Meturin, Its Derivatives and Analogs" BASKAKOV, Yu. A.

V sb. Khim. sredstva zashchity rast. (Chemical Protection of Plants -v Bu. Anim. Specially rest. (Chemical Protection of Plants -- collection of words), No 2, Moscow, 1972, pp 285-291 (from RZh-Khimiya, No 22, 25 Nov 73, Abstract No 22N575 by G. A. Kosminskaya)

Translation: The photochemical decomposition of the herbicide meturin (I) and some of its derivatives and enalogs following UV irradiation was studied. The end product of the photochemical decomposition of I is PhNHCONHIA (II). EPRspectroscopy was used to show that the photochemical decomposition of I proceeds through the formation of the N-mathylcarbamoil-N-phenyl nitrate radical (III). Identical EPR spectra can be obtained by the oxidation of I by PbO2. I and II are found by thin-layer chromatography among the decomposition products of III. There is a direct relationship between the sensitivity of the derivatives and analogs of I to UV light and their herbicidal activity.

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- 51 -

CIA-RDP86-00513R002203410019-9" APPROVED FOR RELEASE: 09/17/2001

621.397.621 UDC

USSR

BEL'SKIY, V. N., DAVIDENKO, S. N., MARKOVA, Yu. V., PILATOVSKIY, A. I., SMIRHOV, A. Ye., and UAKIN, Ye. S.

"Mobile Magnetic Video Recording Station PVS-1"

Moscow, Tekhnika kino i televideniya, No. 6, 1971, pp 33-37

Abstract: The advantage of this mobile video recording station is that it enables personnel involved in TV programming not only to escape the confines of the studio but to transcend the line-of-sight limitations of the portable transmitter. The station was built by order of the State Committee of the Council of Ministers, USER, for Television and Radio, in the VNIITR /expansion unknown/ and was completed in 1970. Short descriptions are given of the equipment complement, the functional system of the station, the video channel, the sound accompaniment, the recording of directors' comments, and other facilities the station affords. Diagrams are given of the equipment layout in this mobile recording studio, and of interconnections of the system blocks. graphs of some of the equipment arealso shown.

USSR

UDC 621.395.74.01

GOGIN, YU. A., UALENTOV. Y.A.

Determination Of The Routes For Information Transmission In Communication

Sb. nauchn. tr. TeNII Svyazi. Leningr. fil. (Collection Of Scientific Works Of The Central Scientific-Research Institute Of Communications.Leningrad Branch), 1970, Issue 5, pp 68-73 (from RZh-Elektrosvyazi, No 2, February 1971, Abstract No 2.64.33)

Translation: A method is considered for determining the routes for information transmission between given junction points of complex communication networks, based on the formulation and solution of a system of logical equations. The proposed method makes it possible to determine the minimum route for information transmission of any choice, and also the routs with a given rank with given limitations on the switching possibilities of the junction points of the net-Determination of the routes for information transmission in complex communication networks with the sid of logical equations makes it possible to find the probability of connectivity between given junctions points of the network. 2 ill. 10 ref. O.N.

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| UNCLA 1/2 012 TITLEPOSSIBLE PREDICTION OF THE USING THE NUCLEUTIDE COMPOSITION USING THE NUCLEUTIDE COMPOSITION AUTHOR-(05)-SAMOILOV, P.M., KOKURI COLISHCHENKO, V.M. | OF DNA -U- NA, N.A., UAROVA, | V.N., VUROBYEV | A. L.I. | |
| AUTHOR-(05)-SAMUTE GRISHCHENKO, V.M. COUNTRY OF INFO-USSR COUNTRY OF INFO-USSR SOURCE-PRIKL. BIOKHIM. MIKROBIOL | | | | |
| SOURCEPRIKL. BIOKHIM. ATTEMPT OF THE PUBLISHED70 | | | | |
| | SCIENCES | | • | |
| SUBJECT AREAS-BIOLOGICAL AND MEE TOPIC TAGS-BACTERIA, MYCOBACTER | IUM, CHEMICAL COMP | OSITION, AMINO | ACID: | |
| TOPIC TAGSBACTERIA, MICHOTIDE, DNA | | | | |
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| CONTROL MARKINGNO RESTRICTIONS | STEP NOUR/041 | 1/70/006/001/0 | 044/0047 | |
| DOCUMENT CLASSUNCLASSIFIED PROXY REEL/FRAME1996/0571 | STEP NU-TOK | | | |
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PROCESSING DATE--160CT70 UNCLASSIFIED ABSTRACT. THE DEPENDENCE BETWEEN COMPN. OF 012 CIRC ACCESSION NO--APOLITEOL DNA AND AMINO ACID CONTENT IN BACTERIAL PROTEIN WAS USED FOR PROVING THE ABSTRACT/EXTRACT--(U) GP-0-POSSIBILITY OF USING PUBLISHED DATA ON DNA COMPN. FOR PREDICTING AMIND ACIDS CONTENT OF THE BACTERIAL PROTEIN. THE NUCLEOTIDE COMPN. OF DWA AND AMINO ACTOS IN PROTEIN OF LACTOBACTERIUM PLANTARUM AND MYCOBACTERIUM LUTEUM WERE STUDIED. SUBSTANTAIL DIFFERENCES IN THE COMPN. OF PROTEINS IN THESE BACTERIA WERE FOUND, ESP. IN THE CASE OF ASPARTIC ACID. PROLINE, ALANINE, VALINE, METHIONINE, TYROSINE, HISTIDINE, AND ARGININE. THE ANALYSES SHOWED THAT THE RELATION BETWEEN THE NUCLEOTICE COMPN. OF DNA AND AMINO ACIDS CONTENT OF TOTAL BACTERIAL PROTEIN WAS TRUE AND RESPECT TO 9 AMIND ACIDS OUT OF 16 STUDIED CASPARTIC ACID, SERINE, GLUTAMIC ACID, PROLINE, GLYCINE, METHIONINE, ISOLEUCINE, TYROSINE, AND ARGININE). IN THE CASE OF ASPARTIC ACID, PROLINE, AND METHIONINE THE EXPIL. FOUND DEVIATIONS IN THE CONTENT OF AMINO ACIDS IN PROTEINS OF L. PLANTARUM IN COMPARISON WITH PROTEINS OF M. LUTEUM WERE HIGHER THAN THEORETICAL DEVIATIONS. THE NUCLEOTIDE COMPNS. OF DNA IN L. PLANTARUM AND M. LUTEUM PROVE THAT DNA OF L. PLANTARUM AND M. LUTEUM IS OF AT AND GC TYPE, RESP. THE CONTENT OF METHIONINE IN THE PROTEIN OF L. PLANTARUM WAS 2. TPERCENT AND THIS WAS HIGHER THAN FOR THE PROTEIN OF M. LUTEUM. INST. BIOCHEM, PHYSIOL MICROORG., MOSCOW, USSR. FACILITY:

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

UNCLASSIFIED

USSR

UDC: 639.389.1:538.213:537.311.31: 669.15-194.56

... nemnosčil i kilos sina pana in prima supracijani izba

BELENKOVA, M. M., UBAROV, A. I., MALUSHEV, K. A., MIKHEYEV, M. N.

"Change in Strength, Electrical and Magnetic Characteristics of Austenitic Steel Type 40Kh4G18F During Heat Treatment and Thermomechanical Treatment"

Sverdlovsk, Fizika Metallov i Metallovedeniye, Vol 36, No 5, Nov 73, pp 971-977.

Abstract: Type 40Kh4G18F aging austenitic steel is hardened by aging, cold and hot plastic deformation, both individually and together. All of the hardening treatments increase the yield point and magnetic permeability of the steel, but not to the same extent for different treatments. Electrical resistance changes more complexly. The greatest increase in magnetic permeability is observed upon cold plastic deformation, the least -- with combined treatment including aging and hot plastic deformation. However, with all hardening treatments the steel has a low value of magnetic permeability, and is therefore a good high-strength nonmagnetic material.

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

Hydraulic and Pneumatic

USSR

LEVSH, I. P., HIYAZOV, M. I., UBAYDULLAEV, A. K., MISHINA, V. N., MUKHITDINOV, KH. KH.

"Mass Transfer and Hydrodynamics in 3-phase Fluidized Bed Using Various Fillers"

Gidrodinamika, Teplo- i Massoobmin v Psevdoozhizh. Sloye [Hydrodynamics, Heat and Mass Transfer in Fluidized Bed], Ivanovo, 1971, pp 202-207. (Translated from Referativnyy Zhurnal Mekhanika, No 1, 1972, Abstract No 181121, by V. A. Kernerman).

Translation: Studies involving fluidization of sprinkled packing (plastic rings, hollow balls and cubes) in three gas-liquid systems on grid plates and overflow plates in apparatus 145 to 300 m in diameter have shown that in the initial period of fluidization of the filler in the 3-phase layer, 10-15 times initial period of fluidization of the filler in a bubbling layer without greater phase contact surface is created than in a bubbling layer without filler. Movement of the filler and pulsating fluid drain through the holes in the plates facilitate intensive renewal of the phase contact surface and interested mass transfer rates. Data are presented on the influence of gas flow rate and sprinkling density on bad resistance and dynamic layer height, as well as the observed values of mass transfer coefficients and the contact surface between phases calculated according to the method suggested. 13 biblio refs.

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

UDC 547.944/945

USSR

UBAYDULLAYEV. K., BESSONOVA, I. A., and YUNUSOV, S. YU., Order of the Labor Red Banner Institute of the Chemistry of Natural Products, Acad. Sc. UzSSR

"Haplophyllum Pedicellatum, H. Obtusifolium and H. Bucharicum Alkaloids. Structure of Bukharamine"

Tashkent, Khimiya Prirodnykh Soyedineniy, No 3, 1972, pp 343-346

Abstract: From the overground portion of H. pedicellatum Bge. haplopine and robustin were isolated; H. obtusifolium yielded skimmianin and evoxin. From repuselin were indicated, in absolution yielded satisfication and every the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the mother liquids of all alkaloids of the overground portion of H. bucharicum the liquids of the mother liquids of the liquid and a new alkaloid -- Litte all alkaloids of the overground portion of H. bucharicum the liquid alkaloids of the liquid alkaloids m.p. 2230. It is optically inactive, dissolves well in methanol, chloroform, and with heating in acids. The roots of H. bucharicum contain six known alkaloids: dictamin, skimmianin, Y-fagarin, robustim, haplopin, and bukharain.

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CIA-RDP86-00513R002203410019-9" **APPROVED FOR RELEASE: 09/17/2001**

USSR

UBERMAN, V. I.

"Theory of the Method of Determination of Numbers, the Sums of Which do not Coincide"

Mat. Modelir. i Teoriya Elektr. Tsepey [Mathematical Modeling and the Theory of Electric Circuits -- Collection of Works], No 10, Kiev, Nauk. Dumka Press, 1973, pp 76-78 (Translated from Referativnyy Zhurnal Kibernetika, No 9, 1973, Abstract No 9V769).

Translation: A principally new method of construction of additively differing numbers in an ordered sequence is studied, having the following advantages: the maximum elements of the series produced by this method is less than the series constructed by known digit-by-digit methods; the elements of the series are placed in a narrower band of integers.

A theorem is proven, the result of which gives a basic recurrent relationship for the series of much simpler form, allowing the volume of the working file in computer memory to be virtually halved. The proof of the theorem has a clear geometric interpretation. Author's view

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UDC 51:155.001.57:612.82

USSR

UBERMAN, Y. I.

"Problems of the Application of Dynamic Methods to the Theory of Control Systems"

Tekhn. Kibernetika. Vyp. 7 [Engineering Cybernetics, No 7 -- Collection of Works], Kiev, 1970, pp 35-46, (Translated from Referativnyy Zhurnal, Kibernetika, No 6, 1971, Abstract No 6 V682 by V. Mikheyev).

Translation: A formalized approach is presented to the investigation of the trajectories of motion, determined by the sequence of states and time intervals between them in a control system. This is performed using the basic rule for the states of the system formulated in a work by V. F. Krotov (RZhMat, 1968, 4B579). According to this rule, the actual states of the systems at each moment in time can only be states corresponding to the local minima of a certain criterion called the potential. The advantages of the method of studying the motion of systems using this rule are noted.

CIA-RDP86-00513R002203410019-9" **APPROVED FOR RELEASE: 09/17/2001**

Pharmacology and Toxicology

USSR

UBAYDULLAYEV, R. U.

"Determination of the Albumen Fraction of Blood Serum by the Method of Paper Electrophoresis for the Purpose of Establishment of Maximum Tolerated Concentrations of Noxious Materials in Atmosphere"

Tr. Uzb. NII San., Gigiyeny, i Profzabolevaniy (Proceedings of the Uzbekistan Scientific Research Institute of Sanitation, Hygiene, and Professional Diseases), 1973, No 5, pp 161-164 (from RZh-Biologicheskaya Khimiya, No 24, Dec 73, Abstract No 2184)

Translation: By means of the refractometric method and paper electrophoresis (EF) the changes of the total albumen content and its fractional composition has been determined in blood serum of rats subjected to a round the clock effect of ethanol for a period of 3 months (I: 5, and 25 mg/m^3). On the 50th day of intoxication with ethanol the quantity of blood serum albumen dropped to 32%, while the quantity of 3- and -globulines increased to 26 and 17.1% respectively in animals getting I at a concentration of 25 mg/m³ (in the controls -- 43.7; 20.9 and 14.6% respectively). Intoxication with I at a dose of 5 mg/m^3 caused no substantive changes in the albumen fractions of the blood. Total quantity of albumen serum did not change in any 1/2

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UBAYDULLAYEV, R. U., Tr. Uzb. NII San., Gigiyeny, i Profzabolevaniy, 1973, No 5, pp 161-164

of the groups. Determination of albumen fractions of blood serum by means of paper EF can be recommended for the determination of maximum permissible concentration of noxious materials in the atmosphere.

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CIA-RDP86-00513R002203410019-9" APPROVED FOR RELEASE: 09/17/2001

USSR

UDC 613.6321614.711612.591.1

UBAYDULLAYEV, R. U., Doctor of Medical Science, Laboratory of Pure Air, Uzbek Scientific Research Institute of Sanitation, Hygiene, and Occupational Diseases

"Hygenic Evaluation of Some Pesticides Used Under the Conditions of a Hot Climate"

Tashkent, Meditsinskiy Zhurnal Uzbekistana, No 8, Aug 73, pp 40-44

Abstract: The effect of pesticides is stronger in Central Asia under the combined conditions of high air temperature, low humidity and high radiant energy than in less harsh conditions. Eethods were developed to determine mil'beks and the procedures to determine hexachlorane, fecalone and phosphamine were improved. Air samples were analyzed for these four compounds at different distances from application and for using different tractors for application. Wil'beks, hexachlorane, fozalone, and phosphamine were completely removed from the air by the 4th, 5th, 6th and 7th day, respectively. For these four compounds in the atmosphere, the single maximum permissible concentrations recommended are 0.01, 0.05, 0.01, and 0.003 mg/m3 respectively. Recommended 1/2

- 42 -

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

USSR

UBAYDULLAYEV, R. U., Meditsinskiy Zhurnal Uzbakistana, No 8, Aug 73, pp 40-44

limits for air over populated areas are 0.1, 0.05, 0.003, and 0.01 mg/m³

respectively. In addition to the increased effect of pesticides at high respectively, they also vaporize more easily and therefore remain in the air for a longer time.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

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UDC 621.774.35.001.4

USSR

PLYATSKOVSKIY, O. A., Doctor of Technical Sciences, POROKHITIKOV, YU. Z., SULADZE, O. N., STATNIKOV, V. M., UBIRIYA, A. YE., Candidate of Technical Principal Parameters of the Deformation Process by High-Temperature Thermomechanical Treatment of Pipes"

Dnepropetrovsk Metallurgicheskaya i Gornorudnaya Promyshlennost, No 4, (70), Jul-Aug 71, pp 34-37

Abstract: At many active pipe rolling plants, reduction mills can be utilized for high-tenperature thermomechanical treatment (HTMT) of pipes. Workers of the All-Union Scientific Research Institute of Pipes and specialists of the Rustavsk Fetallurgical Plant have developed the technology of HTMT of hot-rolled compressor pump pipes (73 x 5.5 mm) of carbon steels (brands 20 and 35) and low-alloyed steel (36G2S) by rolling on a 20-cage reduction mill with rolls 350-400 mm in diameter. The HTMT technology is discussed by reference to diagrams showing the general arrangement and the change of the metal pressure on rolls under different rolling conditions. In HTMT the metal pressure on the rolls of pipes with precooling in deforming cases is approximately twice as high as in the standard process of hot reduction. Investigation data were used for planning an industrial experimental produc-1/2

CIA-RDP86-00513R002203410019-9" **APPROVED FOR RELEASE: 09/17/2001**

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| PLYATSKOVSKIY, O. A., et al., No 4 (70), Jul-Aug 71, pp 34 tion sector of high-quality one table, three bibliograph | -or nump pipes. | THO 111050 | | | |
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UDC 619:616.988.43-094:576.8

USSR

UBRANTSEV, N. M., SYUSYUKIN, A. A., SERGEYEV, V. A., and PROKHOROV, V. V., All Union Scientific Research Foot-and-Mouth Disease Institute and All Union Scientific Research Institute of Veterinary Virology and Microbiology

"The Effect of the Passaging Temperature on Properties of Attenuated Footand-Mouth Disease Virus"

Moscow, Veterinariya, No 1, Jan 71, pp 37-39

Abstract: The epizootic strain (No 663) of A_2 foot-and-mouth disease virus was passaged in a culture of calf kidney cells 5 times at 37°C and 84 times at 24°C. The population and clonal lines of virus passaged 5 times at 37°C were pathogenic for mice and guinea pigs, capable of replicating at 37°C and 40°C, and had no cytopathic activity at 40°C. However, by the 84th passage at 24°C the virus was incapable of replication at 40°C, and several clones did not replicate at 37°C. After the virus was successively passaged at 30°C (30 times), 34°C and 37°C (10 times each) it gradually regained its lost properties, but could not replicate at 40°C. Thus, passaging footand-mouth disease virus at low temperatures and then culturing it at high temperatures produced attenuated variants with the properties of vaccine strains.

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CIA-RDP86-00513R002203410019-9" **APPROVED FOR RELEASE: 09/17/2001**

Pesticides

USSR

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DOBRIYANIN, A. D., and UBRANUS, YA.

"Organization of Health Inspection Over the Storage, Use and Transportation of Pesticides in Agriculture in the Brestskaya Oblast"

V sb. V S"yezd gigiyenistov, epidemiologov, mikrobiologov 1 infektsionistov Belorussii, 1971. Tezisy dokl. (Fifth Congress of Hygienicists, Epidemiologists, Microbiologists and Infectionists of Belorussia, 1971. Summaries of the Reports), Minsk, 1971, pp 70-72 (from HZh-Khimiya, No 1(II), Jan 72, Abstract No 1N372)

Translation: The health and epidemic control service for rayons in the Brestskaya Oblast has taken under observation all industries and organizations which use and distribute pesticides. Dispensary accounting for 1968 shows that there were 1,385 persons working with pesticides. Workers of 10 pest control detachments and 16 bases of the V/O "sel'khoztekhnika" undergo a medical examination twice a year. P. V. Popov.

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

Electricity & Magnetism

USSR.

UCHASTKIN, V. I., and SAMORUKOV, S. B., Moscow State University imeni M. V. Lomonosov

"Magnetoelastic Waves of Finite Amplitude"

Leningrad, Fizika Tverdogo Tela, No 11, Nov 70, pp 3348-3350

Abstract: The initial stage in the formation of traveling magnetoelastic waves of finite amplitude under an inhomogeneous distribution of the internal magnetic field in yttrium ferrite-garnet was studied. It is noted that spin waves of finite amplitude can be obtained in magnetoelastic ferrite systems and that a characteristic of these waves is the change in frequency along the envelop of the signal. This is attributed to expansion of the spectrum of the quasiharmonic magnetoelastic signal. In ferrite delay lines, expansion of the signal at high power levels always appears as a distortion in shape. The role of the instability of nonlinear ferromagnetic resonance in phenomena of this type was therefore studied. The study was conducted at a frequency of 3060 MHz in yttrium ferrite-garnet samples oriented along the [110] axis and having a fairly long spin relaxation time of 10⁻⁶ sec. The magnetoelastic waves were excited and received by a method ordinarily 1/2

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USSR

UCHASTKIN, V. I., and SAMORUKOV, S. B., Fizika Tverdogo Tela, No 11, Nov 70, pp 3348-3350

applied in ferrite variable delay lines. At low levels of the magnetoelastic signal, a linear relationship was obtained between the signal and the input electromagnetic power. When the threshold of nonlinear ferromagnetic resonance was achieved, saturation of the magnetoelastic pulse was observed. Almost simultaneously with saturation there occurs a decrease in the frequency of the basic maximum of the spectrum with respect to the frequency of the input signal. This frequency detuning is explained by the reverse reaction of spin waves excited at nonlinear ferromagnetic resonance. The periodic change in the spectrum was observed to study frequency detuning in different parts of the magnetoelastic pulse. With an increase in power the period of frequency oscillations along the pulse dropped and it is concluded that even in short signals one can obtain a similar oscillation and frequency, but at higher power levels.

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UDC: 621.375.127(088.8)

BUTUZOV, Yu. A., ROZHDESTVENSKIY, A. N., SMOL'KOV, V. V., UCHAYEV, A. L.

"A Protection Device for a Low-Frequency Amplifier"

USSR Author's Certificate No 278771, filed 29 May 69, published 3 Dec 70 (from RZh-Radiotekhnika, No 6, Jun 71, Abstract No 6D128 P)

Translation: A device is proposed for protecting an audio frequency amplifier under overloads. The device contains preamplification stages, a push-pull output, and a feedback circuit with transformer. To improve the reliability and speed of the protector, the base of the transistor in the feedback circuit is loaded by a diode bridge connected to the transformer, and the collector is loaded by a voltage divider. Connected between the resistors of the voltage divider is the controlling electrode of a protection thyristor. The cathode of this thyristor, the collector of the input transistor and the emitter of the output transistor (of different polarity) in the preamplifier are connected to the negative terminal of the power supply through a current-limiting resistor.

1/1

UDC 621.382.2

USSR

GONCHAROV, V. N., KLYUCHNIKOV, V. N., KRYLOV, L. N., LAVRISHIN, Yu. A., LONCHIN, M. A., SEREZHKIN, Yu. N., UCHAYKIN I. G., and YAMASHKIN, Yu. M.

"Role of Microplasma Phenomena in Determining the Properties of Silicon Avalanche Rectifiers"

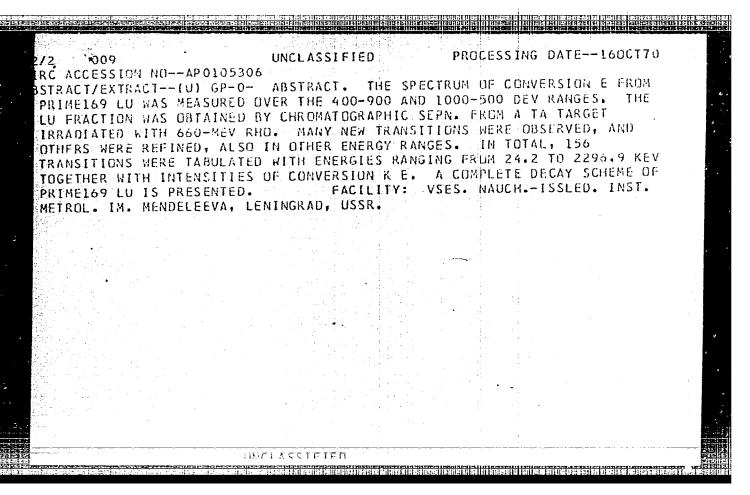
Uch. zap. Mordovsk. un-t (Scientific Notes of Mordovskiy University), 1970, Issue 82, pp 3-20 (from RZh-Elektronika i yeye primeneniye, No 8, August 1971, Abstract No 85195)

Translation: The effect of microplasma phenomena on the characteristics of avalanche rectifiers is considered. A model of the microplasma is presented and the reasons for formation of microplasm are considered. The distribution of microplasm in avalanche rectifiers is presented for the erea of the p-n junction and for breakdown voltages. Means are considered for an increase of the breakdown energy of avalanche rectifiers. Summary.

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

UNCLASSIFIED PROCESSING DATE--160CT70 /2 009 TEE--DECAY OF LUTETIUM-169 -U-THOR-(05)-BALALAYEV, V.A., DZHELEPOV, B.S., MEDVEDEV, A.I., TERNERSESYANTS, V.YE., UCHEVATKIN, I.F. UNTRY OF INFO--USSR URCE--1ZV. AKAD. NAUK SSSR, SER. FIZ. 1970; 34(1), 2-11 TE PUBLISHED----70 BJECT AREAS--NUCLEAR SCIENCE AND TECHNOLOGY PIC TAGS--LUTETIUM ISOTOPE, RADIOACTIVE DECAY SCHEME, CONVERSION ELECTRON SPECTRUM NTROL MARKING--NO RESTRICTIONS CUMENT CLASS--UNCLASSIFIED STEP NU--UR/0048/70/034/001/0002/0011 DXY REEL/FRAME--1988/0230 RC ACCESSION NO--APO105306 UNCLASSIFIED



USSR

BALALAYEV, V. A., DZHELEPOV, B. S., MEDVEDEV, A. I., TER-MERSESYANTS, V. YE., UCHEVATKING I. F., and SHESTOPALOVA, S. A., All-Union Scientific Research Institute of Metrology imeni D. I. Mendeleyev

"On Lu¹⁶⁹ Decay"

Moscow, Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, Vol. 34, No. 1, Jan 70, pp 2-11

Abstract: The conversion electron spectrum of Lu¹⁶⁹ was measured on the $\pi\sqrt{2}$ \$\beta\$-spectrometer of the Institute in the energy ranges 460-900 kev and 1000-1500 kev. Several tens of new lines were observed. A table of transitions in Yb¹⁶⁹ occurring in the decay of Lu¹⁶⁹ is compiled on the basis of these measurements and the data of other authors and covers transition energies from 24 kev to 2300 kev. The transition energies are given together with the mean-square error, and also the intensities of K-conversion electrons, data on the intensities of γ -transitions, calculated conversion coefficients, and the multipolarity. A decay scheme for Lu¹⁶⁹ is given based on all the available data on Yb¹⁶⁹ levels.

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1/3 022 UNCLASSIFIED PROCESSING DATE--27-W /70
TITLE--THE ROLE OF LYSOSOMES OF RETICULOENDOTHELIAL SYSTEM CELLS IN
IMMUNOGENESIS -U-

AUTHOR--UCHITEL, I.YA.

COUNTRY OF INFO--USSR

SOURCE--VESTNIK AKADEMII MEDITSINSKIKH NAUK SSSR, VOL 25, NO 7, 1970, PAGES 65-75
DATE PUBLISHED-----70

SUBJECT AREAS -- BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--ENZYME, DIGESTION, EXCRETION, PROTEINASE, ACID PHOSPHATASE, ANTIGEN, SPLEEN, RABBIT, MOUSE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--3008/0746

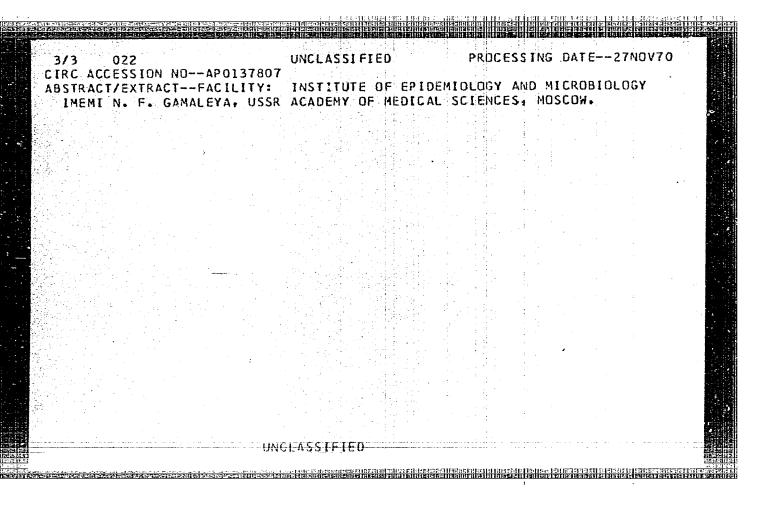
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CIRC ACCESSION NO--APO137807

UNCLASSIFIED

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

2/3 022 UNCLASSIFIED PROCESSING DATE--27NOV70 CIRC ACCESSION NO--AP0137807 ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. ANY PROTECTIVE REACTION OF THE ORGANISM IS BASED ON ITS ABILITY TO IDENTIFY A FOREIGN AGENT AND GET RID THE MOST ANCIENT FORM OF SUCH FUNCTION IS DIGESTION. OF IT. MAIN STAGES OF THE DIGESTIVE PROCESS, CONSUMPTION OF SUBSTANCE, DIGESTION AND EXCRETION, ARE THE SAME IN A MULTICELLULAR ORGANISM AND IN AN INDIVIDUAL CELL. IN COLLABORATION WITH E. L. KHASMAN AND L. G. ZAYTSEVA WE MADE A STUDY OF CATHEPSIN AND ACID PHOSPHATASE ACTIVITY IN THE CELLS OF RABBIT AND MOUSE SPLEENS FOLLOWING ADMINISTRATION OF VARIOUS ANTIGENS (TYPHOID FEVER VACCINE, BOVINE SERUM ALBUMIN, SHEEP ERYTHROCYTES. AND TETANUS TOXOLDI. ENZYMATIC ACTIVITY WAS STUDIED IN THE CELLULAR CYTOPHASM (FIRST FRACTION) AFTER REMOVAL OF NUCLEI, MITOCHONORIA AND LYSOSOMES. AND IN LYSOSOMES, ISQUATED BY DIFFERENTIAL CENTRIFUGATION, AFTER LYSIS WITH DISTILLED WATER (SECOND FRACTION). ACCORDING TO THE DATA OBTAINED IN OUR LABORATORY BY L. G. ZAYTSEVA. SINGLE INTRAVENOUS ADMINISTRATION TO RABBITS OF 50 MG OF BOVINE SERUM ALBUMIN HAD PRACTICALLY NO EFFECT ON ACTIVITY OF LYSOSOMAL ENZYMES IN THE SPLEEN. HOWEVER, ADMINISTRATION OF THE SAME DOSAGE TO PREVIOUSLY IMMUNIZED ANIMALS WAS ASSOCIATED WITH ACTIVATION OF ACID PHOSPHATASE AND (LESS SIGNIFICANT) CATHERSIN IN THE LYSOSOME FRACTION FOR THE FIRST DAY. IN THE LIGHT OF ALL THESE DATA INVESTIGATION OF THE ROLE OF LYSOSOMES AND THEIR ENZYMES IN PROCESSING OF ANTIGENIC MATERIAL, AND FIRST OF ALL INVESTIGATION OF THE PROPERTIES OF ANTIGENS ISOLATED FROM THE LYSOSOME HELP ISOLATE IMMUNOGENIC SUBSTANCES IN PURE FORM. IT IS IMPORTANT TO DETERMINE THE SIGNIFICANCE OF COMPLEX FORMATION OF ANTIGEN WITH RNA IN IMMUNOGENESIS. UNCLASSIFIED



USSR

AKHMATOV, A. S., UCHUVATKIN, G. N.

"Study of the Interaction of Metals with Boundary Friction"

Poverkhnost. Sily v Tonkikh Plenkakh i Dispers. Sistemakh [Surface Forces and Thin Films and Dispersed Systems -- Collection of Works], Moscow, Nauka Press, 1972, pp 307-316, (Translated from Referativnyy Zhurnal, Mekhanika, No 10, 1972, Abstract No 10 A80, by the authors).

Translation: The specific attractive forces P_m of 12 different metals are measured. It is shown that as the lubricant layer thickness in H increases from $2 \cdot 10^{-8}$ to $1.3 \cdot 10^{-7}$ m, the value of P_m decreases according to the rule $P_m = KH^{-4}$. It is shown that under boundary friction conditions with metals, in addition to the short-radius attractive and repulsive forces, forces of relatively large radius of action are also felt. A correlation is determined between P_m and the work function of the metals studied, as well as between P_m and the coefficient of elasticity of the friction contact. 9 Biblio. Refs.

1/2 012 UNCLASSIFIED PROCESSING DATE--230CT70
TITLE--DEPENDENCE OF THE EFFECTIVENESS OF POLYETHYLENE GLYCOL ACTION ON
THE PBR OF A PHOTOGRAPHIC EMULSION -U-

AUTHOR-(03)-SHEBERSTOV, V.I., OVECHKINA, T.G., UCHUVATKINA, T.K.

COUNTRY OF INFO--USSR

SOURCE-ZH. NAUCH. PRIKL. FOTOGR. KINEMATOGR. 1970, 15(1) 70-1

DATE PUBLISHED ---- 70

SUBJECT AREAS -- METHODS AND EQUIPMENT, CHEMISTRY

TOPIC TAGS--PHOTOGRAPHIC EMULSION, PHOTOGRAPHIC CHEMISTRY, POLYETHYLENE,

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1983/0308

STEP NO--UR/0077/70/015/001/0070/0071

CIRC ACCESSION NO--AP0053293

UNCLASSIFIED

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UNCLASSIFIED 012 2/2 PROCESSING DATE--230CT70 CIRC ACCESSION NO--AP0053293 ABSTRACT/EXTRACT--(U) GP-O-ABSTRACT. THE PBR OF A MODEL AMMONIACAL AG IODOBROMIDE PHOTOGRAPHIC EMULSION (3 MOLE PERCENT AGI BASED ON TOTAL AG HALIDE) CONTG. POLYETHYLENE GLYCOL (I) WAS MEASURED TO DET. THE SENSITIZING EFFECTIVENESS OF I. IN EACH SERIES OF EXPTS. THE STARTING EMULSION WAS DIVIDED INTO SEVERAL PORTIONS (SECONDARY EMULSIONS) BEFORE THE 2ND RIPENING, AND THE PBRIMAS DETD. IN EACH OF THEM BY ADDN. OF KBR OR AGNO SUB3 SOLN. THE PH OF ALL THE SECONDARY EMULSIONS WAS APPROX. THE SAME (6.15-6.45). THE SECUNDARY EMULSIONS WERE SUBJECTED TO A 2ND RIPENING UNTIL THE LIGHT SENSITIVITY REACHED A MAX. THE EFFECTIVENESS OF I, COMPARED AT THE SAME RELATIVE DEGREE OF 2ND RIPENING, DECREASED WITH INCREASING PBR. THE EFFECTIVENESS OF I ALSO DECREASED WITH INCREASING DEGREE OF RIPENING. THUS, THE EFFECTIVENESS OF I UNDER PRACTICAL CONDITIONS WAS SO SMALL THAT IT WILL LIKELY BE ELIMINATED WHEN TECHNIQUES FOR PREPG. STABLE PHOTOGRAPHIC EMULSIONS WITH HIGH PBR (IS GREATER THAN OR EQUAL TO 4.01 ARE DEVELOPED. UNCLASSIFIED

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R002203410019-9"

USSR

UDC 621.762.002.5(088.8)

UDACHIN, I. V., MAKAROV, V. S., TIMOSHIN, D. Ya., GAYEV, O. B., and GRIN, L. T.

"Device for Processing Powdered Materials With Liquids"

USSR Author's Certificate No. 268619, Filed 1/07/68, Published 3/08/70 (Translated from Referativnyy Zhurnal-Metallurgiya, No. 2, 1971, Abstract No. 2 G472 P).

Translation: The device includes a container, the base of which is equipped with a drainage aperture and a perforated barrier. In order to eliminate exidation of the powder near the bottom of the container as it is dried, an automatic valve is mounted coaxially with the drainage aperture for drainage of the liquid.

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